

ABSTRACT

In a magnetic bearing apparatus provided at least with a touchdown bearing and a corrugated plate-like damper member inserted into an annular gap between the touchdown bearing and its retainer member, to keep on holding the corrugated plate-like damper member in a predetermined position without fail.

A cylindrical retainer member 9 is a thrust bearing retainer member and also a touchdown bearing retainer member. A touchdown bearing 4, i.e., a pair of roller bearings 4a and 4b disposed in upper and lower stages are received in an inner circumferential portion of the cylindrical retainer member 9. An annular gap G is formed between the inner circumferential surface of the cylindrical retainer member 9 and outer races of the pair of roller bearings 4a and 4b. A pair of corrugated strip steel plates 8a and 8b that are the corrugated plate-like damper members are inserted into this annular gap G. Also, a strip-like metal thin plate 10a is inserted while being clamped between the upper corrugated strip steel plate 8a and the lower corrugated strip steel plate 8b. Thus, the strip-like metal thin plate 10a functions as a positional offset preventing means of the pair of corrugated strip steel plates 8a and 8b.